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Summary of “Epiphenomenalism - the Do’s and the Don’ts” by Larry Shapiro and Elliott Sober

Larry Shapiro and Elliott Sober argue for an empirical manipulationist approach to causation. They argue that certain epiphenomenalist positions, such as that of Jaegwon Kim regarding mental causation and that of Walsh, Lewens, and Ariew regarding the causal inertness of natural selection in biological evolution, make a conceptual error in how epiphenomenalism should be formulated. Shapiro and Sober argue that their account of causation and its resulting modification of the doctrine of epiphenomenalism are able to resolve the problems posed by the arguments for these two forms of epiphenomenalism.

Using various examples drawn from the sciences (e.g. Weismann’s disproof of Lamarckian theory of inheritance), Shapiro and Sober argue that the proper way to test for the causal influence of a specific potential causal factor is to hold fixed various other causal factors and background conditions while modifying (or “wiggling” in the authors’ language) the factor in question. If there is a corresponding change in the effect in question (probabilistically for Shapiro and Sober), then one can conclude that the causal factor being examined is indeed a cause of the effect. If no variance in the effect is able to be observed, then the causal factor is rather no such thing at all and is causally inert with respect to the effect in question.

Shapiro and Sober draw their first broad conclusion regarding epiphenomenalism from the considerations in the above paragraph. Epiphenomenalism is traditionally taken to mean the view that a certain property or event is completely void of all causal powers whatsoever. Shapiro and Sober, however, argue that their methodology for determining the causal efficacy of a given potential cause, is only able to demonstrate the lack of causal powers with respect to some other specific class of properties or events, not the lack of any causal powers whatsoever. So epiphenomenalism properly formulated would be the claim that "some set of property instantiations fails to affect some other set, not that the first set has no effects at all." (Shapiro and Sober, pg. 3)

Shapiro and Sober use the example of barometric pressure and a corresponding storm to argue the above point. If one grants that there is a correlation between storms and barometric pressure, the question then arises regarding the causal influence of the barometer reading in producing the storm. In other words, is the barometer reading a causal factor in producing the storm, or is there some third causal factor (or set of causal factors; I.e. the barometric pressure of the atmosphere itself) that is responsible for producing both the storm and the barometer reading? To test this theory, one holds fixed the background conditions (the surrounding atmospheric barometric pressure) while wiggling the barometer reading. The lack of effect

on the surrounding storm merely by manipulating the barometer dial manually would sufficiently demonstrate that the barometer reading is causally inert with respect to the storm. Wiggling the barometric pressure itself, however, would have a noticeable effect on the storm presumably, so one would be justified in concluding that the actual barometric pressure is indeed a causal factor in producing the storm. The crux of this consideration, however, is that this methodology does not prove that the barometer reading has no effects whatsoever, only that the barometer reading is causally inert *with respect to the storm*. It is perfectly conceivable, then, according to Shapiro and Sober, that the barometer reading could be causally relevant in producing a different set of effects, even if the barometer reading were to be labeled epiphenomenal with respect to storms. One would have to test the barometer reading with respect the this supposed different set of effects to draw any conclusion about its supposed causal efficacy here.

After drawing these general conclusions about epiphenomenalism, Shapiro and Sober turn their attention specifically to Jaegwon Kim's causal exclusion argument against mental causation (what they refer to as *the master argument for epiphenomenalism)*, with these conclusions about epiphenomenalism and their manipulationist methodology in mind. The master argument for epiphenomenalism is that a supervening mental property that

supervenes on a micro-supervenience base would then have no causal powers in addition to those already had by the supervenience base. As they state, “The absence of these additional causal powers is then taken to show that the mental property…is causally inert.” (Shapiro and Sober, pg.7) Shapiro and Sober point out that there are other arguments for epiphenomenalism than the master argument, but they are correct in pointing out also that proponents of the epiphenomenalist view probably have something like this argument behind their position.

With their initial considerations in mind, Shapirio and Sober argue that this master argument for epiphenomenalism regarding the causal efficacy of mental properties asks one to consider a situation that is conceptually impossible. Using their manipulationist account of causation, in order to determine whether a given supervening mental property has any causal powers with respect to a supposed effect, one would have to hold fixed the micro-supervenience base (along with any relevant background conditions) while wiggling the supervening property to try to bring about a change in the effect in question. Shapiro and Sober argue that this counterfactual situation, in which one holds fixed the micro-supervenience base while modifying the supervening property itself is impossible. Recall the role that any supervenience base plays regarding its supervening properties. The supervenience base is a sufficient condition, or set of

conditions, for the supervening property. If the supervenience base is held fixed, as Shapiro's and Sober's method would require, there would then be no way to modify the supervening property, as the fixed supervenience base would then necessitate a fixed supervening property.

Jaegwon Kim's argument relies heavily on a principle known as Alexander's Dictum, the claim that to be real is to have unique causal powers. This principle is the driving force behind Kim's requirement that a mental property must have unique causal powers above and beyond those of its micro-supervenience base in order to avoid epiphenomenalism. While Shapiro and Sober could, in principle, grant Kim that a supervening mental property could have no causal powers in addition to those of its supervenience base, they argue that this does not lead to the conclusion that the mental property has no causal powers; just that the mental property would have no unique causal powers. Their argument thus also seems to me to be a rejection of Alexander's Dictum, and Kim's demand that a mental property's causal powers be above and beyond those of its supervenience base.

Shapiro and Sober argue that their solution to the problem of causal exclusion holds an advantage over Kim's proposed *functional model of reduction*, which is his own attempt to avoid the consequence of epiphenomenalism in mental properties. On this

functional model, a token mental property is identified with its functional role in terms of a physical property that instantiates that functional role. This would lead to the conclusion that mental properties have only the causal powers of their physical supervenience bases and the functional roles instantiated by those bases, and no extra or additional causal powers. Kim's solution would amount to a rejection of non-reductive physicalism in favor of a functionalist reduction of mental properties to their functional roles.

Shapiro and Sober see a weakness in Kim's functional model, although they are satisfied with the conclusion that mental properties have no special causal powers beyond those of their supervenience bases. The problem they anticipate for Kim's functional reduction solution to the problem of mental causation is that their empirical position allows for the possibility that some macro-properties are not reducible (i.e. functionalizable). For example, Kim, Shapiro, and Sober all seem to agree that qualia cannot be functionalized. Kim would then have to conclude that qualia are indeed causally inert and epiphenomenal, while Shapiro's and Sober's empirical approach to causation would allow for straightforward interventionist testing of qualia in terms of behavior, which they take to be an instance of scientific method free from potentially problematic considerations of functional roles. Yet another problem raised for Kim's functional reduction solution is that functional properties are usually taken to be

multiply realizable, which is to say that a given functional relation can be instantiated by a variety of physical bases. Kim's straightforward identity of a token functional relation with a token physical base and its function would preclude this possibility. The only option left open to Kim would then be to conclude that there are no general mental properties (or functional relations), only specific functional relations resulting in a vast plurality of specific mental property tokens. Freeing oneself from considerations about functional roles has the advantage of keeping a general and unified account of mental properties rather than Kim's disunified picture of mental properties.